

HackDuke Nonprofits Track Info

Overview

This new track allows hackers to work directly and contribute to the needs of local nonprofit organizations. At the beginning of the weekend, non-profits will present about their various projects during their track talk (12:30-1:00 pm). Over the next 24 hours, teams will collaborate and consult with the non-profits to innovate and present their ideas at the end.

The non-profits or their representatives will then decide which hack is the most useful. One unique feature is that the winners of each project will qualify for funding provided by HackDuke and can choose to continue working on the hack throughout the year. The overall winning team of the track will also be chosen by our track sponsor, [Coding it Forward](#), and win a \$500 cash prize + priority application to their [Civic Digital Fellowship](#).

Our 2019 Nonprofit Partners!

 **Reality Ministries** →

About

Reality Ministries is a faith-based non-profit in Durham where folks with and without disabilities share life.

We have over 400 active participants and volunteers who participate in various programs: a Farm, a Cafe, a Daytime Program, an Evening Program, and a once-yearly talent show at the DPAC. At the core of Reality's values are belonging, mutuality, and friendship.

Check out a snippet of the fun we have here: [The 2016 Reality Ministries Talent Show](#)

Project: The Problem of Transportation

Transportation is the bane of our existence at Reality. If someone isn't able to get to one of our programs, it's almost always because they don't have a reliable ride.

We have over 250 participants, and less than 5% of them drive themselves. People have various means of getting to our programs - group home vans, public buses, special ADA buses, family members, volunteers at Reality.

Is there a way for us to gather in one place the transportation needs of our participants and those who can meet those needs? Could we create Reality's very own carefully-monitored, relational Uber system to address this problem?

An idea for a way that transportation problem could be solved is to create an interactive map, coded by name, involvement at Reality (participant, volunteer, parent, etc.).

Distribute Aid →

About

We are a Europe-wide network that connects refugee aid groups. Our tools help refugee aid groups discover and connect with each other, collaborate on aid shipments, share knowledge, and engage volunteers. Learn more [here](#)!

Project 1: The Map(s)

It is hard to get a big-picture understanding of the refugee aid movement, and even more so when you care about a specific aspect of it such as upcoming aid shipments or where there is a need for a new medical aid group. Our [Maps Tool](#) is the perfect place to present this overview in a concise, understandable manner! It certainly needs some love to reach its full potential, and it shouldn't be limited to one page. It'd be great to show locations and visualizations wherever they can add improve understanding or provide more context.

How we collect geographical information is just as important as how we present it. It must be easy for aid groups to add data with new locations, such as a project or a pickup stop for a shipment. Relatedly, the address and geolocation data might not line up exactly, so it could be important to set the address and longitude / latitude separately. Perhaps most importantly, we must ensure that we don't over-collect

sensitive information or show restricted information in a more public context. For example:

- Only groups that run a safehouse should know it's exact location.
- In some cases groups that run a warehouse do not want to publish that information publicly, but do need to share it with groups sending them aid.

This project will be equally front-and-backend focused, and teams choosing it will have the flexibility to choose where to focus their time and attention. We have provided a [Milestone on Gitlab](#) with some initial direction- as usual this is just a starting point and we'd love to see where you take it!

Project 2: Collaboration Opportunities

Our supply chain tools, the [Inventory Manager](#) and [Shipment Coordinator](#), currently collect and share quite a bit of useful information! This is certainly an improvement over the status quo, where groups were only able to share this information with a limited number of partners within their existing network. But the same effect can happen for the opposite reason- it's equally hard for groups to discover opportunities to collaborate if they are lost in a sea of information!

We'd love to build upon our previous work by defining and implementing a number of collaboration opportunities. These range from the explicit to implicit. For example:

- Groups should be able to identify partners in collaborative projects, and each partner should have the ability to edit / update the project information (similar to how shipments work).
- Groups should be able to indicate who they support, and receive update notifications when their supportee updates a needs list (and vice-versa).
- Opportunities should be surfaced to groups who might not have a formal or social relationship- such as extra space on a shipment to your area, or a group who needs items that you have (and vice-versa).

Our existing tools help surface information to make these collaborations possible. These features will make those collaborations actually happen! This project will involve front and backend work, and teams can choose how they want to focus their time and attention. The [Milestone on Gitlab](#) is a good place to get started, and we're excited to see your fresh perspective on how to help aid groups collaborate better!

NOTE: We're aware that we need better ways to facilitate communication with / between groups on the Platform. If you'd like to focus on that angle, please use [Twilio](#) to do so. We're planning chat, email, and WhatsApp integrations, but you need special permission for their WhatsApp #s so we recommend focusing on the others for now.



About

Established in Durham, NC in 1994, Shodor is a nonprofit organization serving students and educators by providing materials and instruction relating to computational science (scientific, interactive computing).

With an Internet presence producing 3 to 4 million page views per month, Shodor has an international impact. Its award-winning, free online education tools such as Interactivate are popular with students and educators alike. Shodor is transforming learning through computational thinking. In the Raleigh-Durham, NC area, Shodor offers workshops, apprenticeships and internships for youth and teens to build excitement for science, technology, engineering, and mathematics (STEM) through interactive explorations using hands-on and computer-enhanced activities, giving them the experience they will need to pursue a technology-intensive career path.

If students are interested, we have internships and volunteer opportunities, more information is available [here](#).

Project: Website Redesign

Help redesign our main website, <http://shodor.org>! We currently have a dated design, and we would like to get ideas for how to make it look more up-to-date while being both desktop and mobile friendly. One thing we do want to avoid is the infinite scrolling design of some websites. We have a lot of information that we want to keep compact and make it easy to find things without having to scroll a lot. Otherwise, we don't have many specific design suggestions; actually, we don't have many staff with design expertise anymore (which is why we haven't redesigned it ourselves yet!), and so we are hoping to get some good ideas to work with.